

WHAT IS CLAIMED IS:

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1. A method of reporting a system failure in a server system, comprising:
detecting a system failure condition;
transmitting failure information related to the failure condition;
storing the failure information; and
reporting an occurrence of an event.
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2. The method of Claim 1 wherein:
the act of transmitting the failure information comprises transmitting the
failure information to a system recorder;
the act of storing the failure information comprises storing the failure
information in a system log; and
the act of reporting an occurrence of an event comprises reporting the
~~occurrence of the event to a central processing unit of the server system~~
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3. The method of Claim 2 further comprising notifying an operator of the
system failure.
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4. The method of Claim 3 wherein the act of notifying an operator
comprises displaying a message on a monitor coupled to the central processing unit.
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- ~~5. The method of Claim 3 further comprising accessing the system log to
read the failure information from the system log.~~
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6. The method of Claim 2 further comprising determining when the failure
condition occurred and storing a representation of when the failure condition occurred
in the system log.
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7. The method of Claim 2 wherein the act of reporting the occurrence of
the event to the central processing unit comprises:

sending an event signal to a system interface, coupled to the central processing unit;

setting a bit in a bit vector within the system interface, wherein the setting of the bit corresponds to a specified type of system failure; and

5 sending an interrupt signal to the central processing unit after the bit is set, wherein, upon receiving the interrupt signal the central processing unit reads a status register within the system interface to ascertain that the event signal has been received by the system interface.

10 ⁷ 8. The method of Claim ⁶ ~~7~~ further comprising reading the bit vector to ascertain a type of event.

⁸ ~~9~~ 9. The method of Claim 2 wherein the act of reporting the occurrence of the event to the central processing unit comprises:

15 sending an event signal to a system interface, coupled to the central processing unit;

setting a bit in a bit vector within the system interface, wherein the setting of the bit corresponds to a specified type of system failure; and

20 setting a status of a status register within the system interface to indicate the occurrence of the event, wherein the central processing unit monitors the status register within the system interface at specified periodic intervals.

⁹ ~~10~~ 10. The method of Claim ⁸ ~~9~~ further comprising reading the bit vector to
25 ascertain a type of event.

¹⁰ ~~11~~ 11. The method of Claim 2 further comprising reporting the occurrence of the event to a local computer connected to server system via a remote interface.

30 ¹¹ ~~12~~ 12. The method of Claim ¹⁰ ~~11~~ wherein the act of reporting the occurrence of the event to the local computer comprises:

25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

12 sending an event signal to the remote interface;
13 setting a bit in a bit vector within the remote interface, wherein the
14 setting of the bit corresponds to a specified type of system failure; and
15 notifying the local computer that the event signal has been received by
16 the remote interface.

17 12/13. The method of Claim 11 wherein the act of notifying the local computer
18 comprises transmitting a ready-to-read signal to the local computer, wherein, upon
19 receiving the ready-to-read signal, the local computer interrogates the remote interface
20 to ascertain that the bit in the bit vector has been set.

21 13/14. The method of Claim 12 further comprising notifying a local operator,
22 who is using the local computer, of the system failure.

23 14/15. The method of Claim 13 wherein the act of notifying the local operator
24 comprises displaying a message on a monitor coupled to the local computer.

25 15/16. The method of Claim 14 further comprising accessing the system log
26 through the local computer to read the failure information.

27 16/17. The method of Claim 2 further comprising reporting the occurrence of
28 the event to a remote computer connected to the server system via a remote interface,
29 wherein the remote computer is connected to the remote interface via a modem-to-
30 modem connection.

31 17/18. The method of Claim 16 wherein the act of reporting the occurrence of
32 the event to the remote computer comprises:

33 sending an event signal to the remote interface;
34 setting a bit in a bit vector within the remote interface, wherein the
35 setting of the bit corresponds to a specified type of system failure; and
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notifying the remote computer that the event signal has been received
by the remote interface.

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19. The method of Claim 18 wherein the act of notifying the remote
computer comprises:

automatically calling a phone number corresponding to a modem
coupled to the remote computer, wherein, upon receiving the call, the remote
computer interrogates the remote interface to ascertain that the bit in the bit
vector has been set.

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20. The method of Claim 19 further comprising:

verifying that the remote computer is authorized to access the server
system via the remote interface; and

verifying that a communication link has been established between the
remote computer and the remote interface.

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21. The method of Claim 20 further comprising notifying a remote operator,
who is using the remote computer, of the system failure.

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22. The method of Claim 21 wherein the act of notifying the remote
operator comprises displaying a message on a monitor coupled to the remote
computer.

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23. The method of Claim 22 further comprising accessing the system log
through the remote computer to read the failure information.

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24. A method of reporting a system failure in a server system, comprising:
detecting a system failure condition;

transmitting failure information related to the failure condition to a
functional system recorder; *an independently*

assigning a time value to the failure information;

for 52
storing the failure information and its time value in a system log;
reporting an occurrence of an event to a central processing unit coupled
to the server system; and
communicating failure information from the system log to an operator.

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28. The method of Claim 23 wherein the act of reporting the occurrence of
the event comprises:

sending an event signal to a system interface, coupled to the central
processing unit;

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setting a bit in a bit vector within the system interface, wherein the
setting of the bit corresponds to a specified type of system failure; and

sending an interrupt signal to the central processing unit after the bit is
set, wherein, upon receiving the interrupt signal the central processing unit
reads a status register within the system interface to ascertain that the event
signal has been received by the system interface.

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28. The method of Claim 24 further comprising reading the bit vector.

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28. The method of Claim 24 wherein the act of reporting the occurrence of
the event to the central processing unit comprises:

sending an event signal to a system interface, coupled to the central
processing unit;

setting a bit in a bit vector within the system interface, wherein the
setting of the bit corresponds to a specified type of system failure; and

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setting a status of a status register within the system interface to
indicate the occurrence of the event, wherein the central processing unit
monitors the status register within the system interface at specified periodic
intervals.

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28. The method of Claim 27 further comprising reading the bit vector.

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28. The method of Claim 24 wherein the specified type of failure is selected from a group consisting of: a central processing unit failure, a power supply failure, a fan failure, a canister failure, and a temperature failure.

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30. A method of reporting a system failure in a server system, comprising:
detecting a system failure condition;
transmitting failure information related to the failure condition to a system recorder;
assigning a time value to the failure information;
10 storing the failure information and its time value in a system log;
reporting an occurrence of an event to a local computer coupled to the server system via a remote interface; and
~~communicating failure information from the system log to an operator.~~

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31. The method of Claim 30 wherein the act of reporting the occurrence of the event to the local computer comprises:
sending an event signal to the remote interface;
setting a bit in a bit vector within the remote interface, wherein the setting of the bit corresponds to a specified type of system failure; and
20 notifying the local computer that the event signal has been received by the remote interface.

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32. The method of Claim 31 wherein the act of notifying the local computer comprises transmitting a ready-to-read signal to the local computer, wherein, upon receiving the ready-to-read signal, the local computer interrogates the remote interface to ascertain that the bit in the bit vector has been set.

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33. The method of Claim 32 further comprising notifying a local operator, who is using the local computer, of the system failure.

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The method of Claim 33 wherein the act of notifying the local operator comprises displaying a message on a monitor coupled to the local computer.

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Sub C2

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A method of reporting a system failure in a server system, comprising:
detecting a system failure condition;
transmitting failure information related to the failure condition to a system recorder;
assigning a time value to the failure information;
storing the failure information and its time value in a system log;
reporting an occurrence of an event to a remote computer coupled to the server system via a remote interface, wherein the remote computer is connected to the remote interface via a modem connection; and
~~communicating failure information from the system log to an operator.~~

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The method of Claim 35 wherein the act of reporting the occurrence of the event to the remote computer comprises:

sending an event signal to the remote interface;
setting a bit in a bit vector within the remote interface, wherein the setting of the bit corresponds to a specified type of system failure; and
notifying the remote computer that the event signal has been received by the remote interface.

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The method of Claim 36 wherein the act of notifying the remote computer comprises:

automatically calling a phone number corresponding to a modem coupled to the remote computer, wherein, upon receiving the call, the remote computer interrogates the remote interface to ascertain that the bit in the bit vector has been set.

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The method of Claim 37 further comprising:

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verifying that the remote computer is authorized to access the server system via the remote interface; and

verifying that a communication link has been established between the remote computer and the remote interface.

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39. The method of Claim ³⁸ further comprising notifying a remote operator, who is using the remote computer, of the system failure.

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40. The method of Claim ³⁸ wherein the act of notifying the remote operator comprises displaying a message on a monitor coupled to the remote computer.

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sub C3
41. A method of reporting a system failure in a server system, comprising:
detecting a system failure condition;
transmitting failure information related to the failure condition to a system recorder;
storing the failure information in a system log; and
executing a central processing unit operation in response to detecting ~~a system failure condition~~

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42. The method of Claim ⁴¹ wherein the ~~central~~ ^{central} processing unit operation comprises notifying an operator of the system failure.

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43. The method of Claim ⁴² wherein the act of notifying an operator comprises displaying a message on a monitor coupled to the central processing unit.

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44. The method of Claim 41 wherein the central processing unit operation comprises accessing the system log to read the failure information stored therein.